

embody the underlying action of all the different designs. An elementary application is shown in Fig. 50.

Irregular shaped castings which must be machined often present no apparently good means of holding by ordinary gripping appliances for drilling, shaping, or milling. In such cases a gripping dog, as illustrated in detail in Fig. 51, may be used. The base block *C* of the dog is slotted to receive jaw *J*, which is fulcrumed on a cross-pin. In the tail of the dog is threaded a set-screw *E*, and by turning in this set-screw the jaw is caused to "bite" inward and downward at the same time, firmly grip-

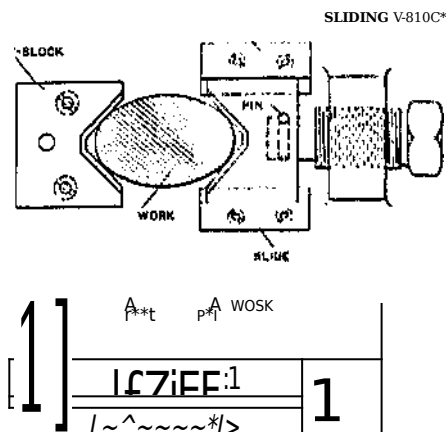


Fig. S3. Work Held by V-dampt

ping the casting and forcing it down on the table. A backstop *F* is bolted behind each dog so that there is no chance for slipping away from the work.

Applications to Jig Design.  
— The preceding description and illustrations indicate the

principles embodied in jig clamping devices. The following typical illustration\* show a number of applications that are merely modifications of their various methods already reviewed. Most of the devices described may be quickly operated, the purpose being to show a collection of efficient designs that will hold the work securely. They have the further advantage of being relatively simple, so that the jigs can be made at a moderate cost in all cases where there are